

इंटरनेट

मानक

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“जानने का अधिकार, जीने का अधिकार”

Mazdoor Kisan Shakti Sangathan

“The Right to Information, The Right to Live”

“पुराने को छोड़ नये के तरफ”

Jawaharlal Nehru

“Step Out From the Old to the New”

IS 7479 (1985): Specification for Recess Penetration Gauges
[PGD 31: Bolts, Nuts and Fasteners Accessories]



“ज्ञान से एक नये भारत का निर्माण”

Satyanarayan Gangaram Pitroda

“Invent a New India Using Knowledge”



“ज्ञान एक ऐसा खजाना है जो कभी चुराया नहीं जा सकता है”

Bhartrhari—Nitiśatakam

“Knowledge is such a treasure which cannot be stolen”

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Indian Standard

SPECIFICATION FOR
RECESS PENETRATION GAUGES

(First Revision)

1. Scope — Covers the requirements of recess penetration gauges for checking cross recesses to IS : 7478-1985 'Dimensions for cross recesses (first revision)'. Method of penetration gauging of cross recesses is given in Appendix A.

2. Terminology — Shall be as given in Fig. 1.

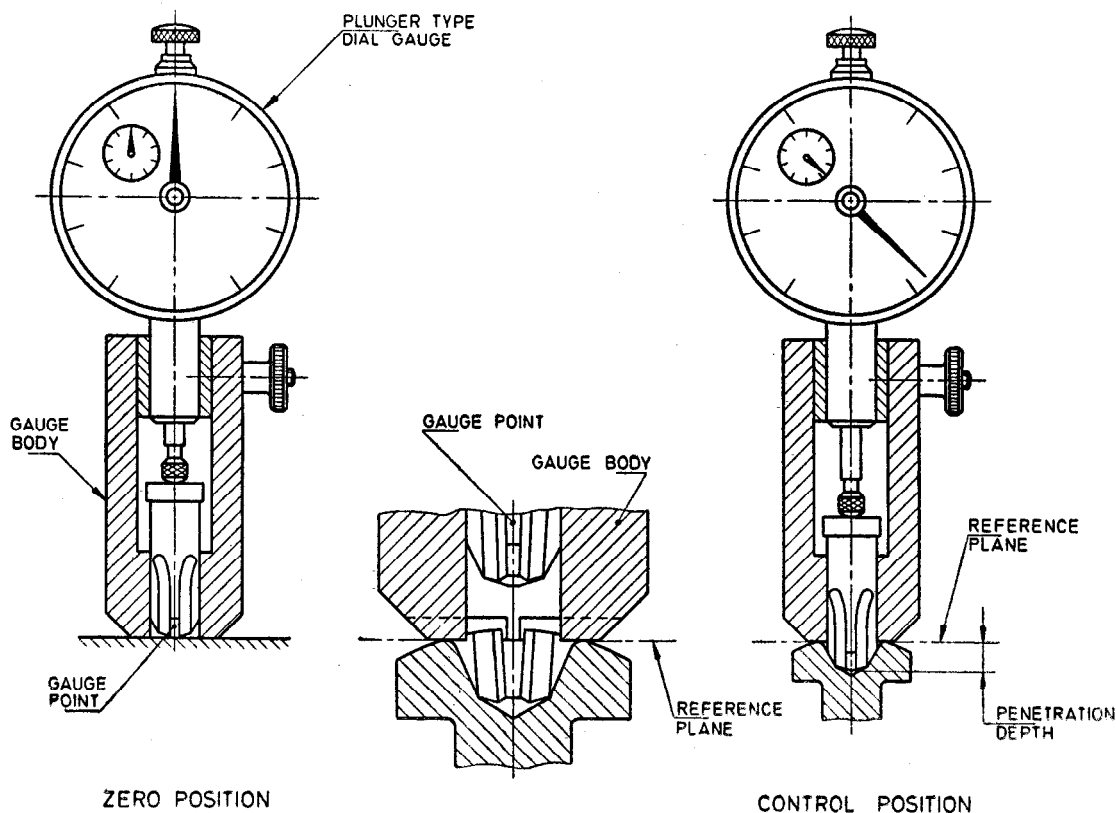


FIG. 1 METHOD OF PENETRATION GAUGING OF CROSS RECESSES

3. Dimensions — The dimensions of gauge point are given in Table 1.

4. Finish — The gauge point shall be hardened to 750 HV minimum [see IS : 1501-1969 Method of Vickers hardness test for steel (first revision)] and ground to obtain a good finish.

5. Material — The gauge point shall be made of gauge steel.

6. General Requirements

6.1 Dial Gauge — The dial gauge used with recess penetration gauge shall conform to IS : 2092-1983 'Specification for plunger type dial gauges'.

7. Designation — Shall be designated by the name, recess No. and the number of this standard.

Example:

A recess penetration gauge of recess size No. 2 shall be designated as:

Recess Penetration Gauge 2 IS : 7479

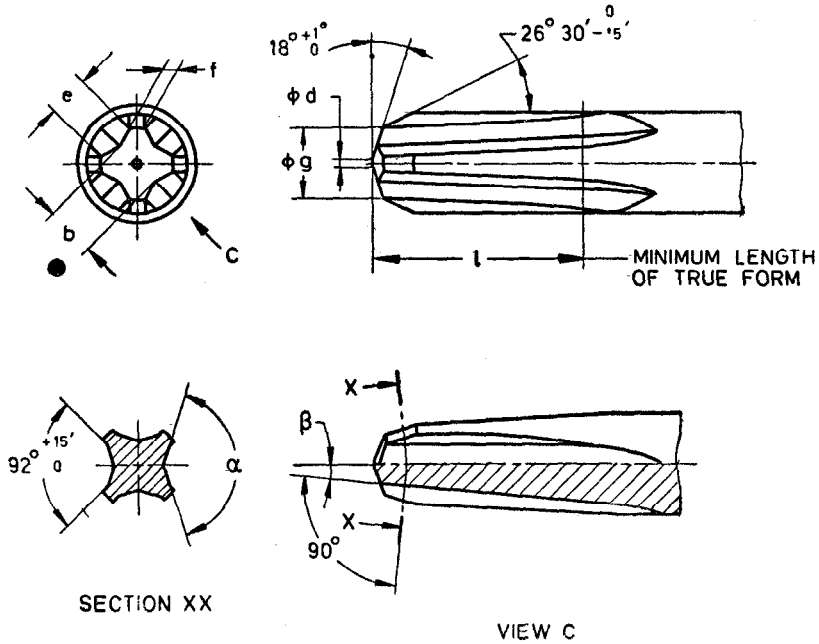
Adopted 17 December 1985

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TABLE 1 GAUGE DIMENSIONS FOR RECESS TYPE H
(Clause 3)

All dimensions in millimetres.



Gauge No.	0	1	2	3	4
$b \begin{smallmatrix} 0 \\ -0.025 \end{smallmatrix}$	0.64	1.001	1.530	2.497	3.574
$g \begin{smallmatrix} +0.025 \\ 0 \end{smallmatrix}$	0.813	1.27	2.286	3.91	5.08
$d \begin{smallmatrix} +0.13 \\ 0 \end{smallmatrix}$	0.25	0.38	0.38	0.38	0.38
$e \begin{smallmatrix} 0 \\ -0.025 \end{smallmatrix}$	0.315	0.513	1.102	2.098	2.738
$f \begin{smallmatrix} 0 \\ -0.06 \end{smallmatrix}$	0.31	0.51	0.64	0.97	1.12
$l \quad Min$	3.16	3.17	4.71	7.14	8.74
$\alpha \begin{smallmatrix} +15' \\ 0 \end{smallmatrix}$	*	138°	140°	146°	153°
$\beta \begin{smallmatrix} 0 \\ -15' \end{smallmatrix}$	7°	7°	5° 45	5° 45	7°

*This will be replaced by $r \ 0.25 \pm 0.025 \text{ mm}$ [see IS : 7478-1985 Dimensions for cross recesses (first revision).]

8. Packing — Gauges shall be coated with a suitable rust preventive and packed so as to prevent damage during transit.

9. Marking — Gauge bodies and gauge points shall be marked legibly with the following:

- a) Recess No, and
- b) Manufacturer's name or trade-mark.

9.1 ISI Certification Marking — Details available with the Indian Standards Institution.

APPENDIX A

(Clause 1)

METHOD OF PENETRATION GAUGING OF CROSS RECESSES

A-1. The penetration depth of the depth gauge (minimum dimensions) is indicated in the different product standards. It is the test dimension for the usability of the cross recess.

A-2. The point of the gauge is identical with the point of the respective screwdriver. A sleeve serves to guide the gauge and fix the reference plane. This plane passes through the point of intersection of the recess wings and the top surface of the screw head. It corresponds thus to the surface of a screw with flat head. In the case of crowned screw heads, it lies below the crown in the transition area from the recess wings to the surface of the head. For these screw heads, the reference plane is fixed with the help of the bearing surfaces of the gauge sleeve.

A-3. The penetration depth of the gauge is measured from the reference plane by using a dial gauge. The zero and control positions of the depth gauge can be found on a flat surface.

A-4. Due to the permissible error for the core thickness b of the gauge point, an inaccuracy of up to 0.13 mm can arise when measuring penetration depth.

A-5. A typical example of the method of application of recess penetration gauge is given in Fig. 1.

EXPLANATORY NOTE

This standard was originally published in 1974. The revision has been taken up to align this standard in line with the agreement reached at International level (ISO).

This standard is in full conformity with ISO 4757-1983 'Cross recesses for screws' issued by the International Organization for Standardization (ISO).